Sub. B1 Q8

when Z is -NH-, R^4 cannot be phenylethyl; and
when A is a covalent bond, R^1 and R^2 are both hydrogen, Y^2 is methylene, and R^4 is methyl or ethyl, R^3 cannot be lower alkyl or unsubstituted phenyl; and
when A is a covalent bond, R^1 and R^2 are both hydrogen, T is oxygen, Z is nitrogen, and Y^2 is methylene, R^4 cannot be cycloalkyl or unsubstituted phenyl.

Q9 Sub B1 44. (Once amended) The compound of claim 43, wherein R^3 is 4-t-butylphenyl and R^4 is methyl, namely 6-{[4-(tert-butyl)phenoxy]methyl}-4-methylthio-1,3,5-triazine-2-ylamine.

Q10 Sub B1 62. (Once amended) The method of claim 1 wherein the therapeutically effective dose includes at least one pharmaceutically acceptable excipient.

REMARKS

Claims 1, 3-13, 28-36, 38-44 and 62-63 are pending in the application. Claims 2, 14-27, 37, and 48-61 have been cancelled from this application without prejudice to Applicant's right to introduce the cancelled claims in a related continuing application. Claims 1, 3, 9, 28, 30, 32, 34, 36, 44 and 62 have been amended primarily to clarify what it is the Applicant's regard as their invention in order to overcome the Examiner's section 112 claim rejections. No new matter has been added to the application by way of these claim amendments.

A marked up version of the amended claims is attached hereto as Appendix A pursuant to 37 CFR 1.121. A clean set of all pending application claims is attached hereto as Appendix B for the Examiner's convenience.

The Examiner's objections and rejections are overcome or traversed as set forth below.

I. THE RESTRICATION REQUIREMENT - Election of Group I

The Examiner restricted the claims into three separate Groups:

I Claims 36-46, 62-63, 1-22 and 28-35, drawn to compounds of Formula I wherein X^1, X^2 and X^3 are nitrogen, corresponding composition and method of use.

II. Claims 36, 57-63, 1 and 23-25, drawn to compounds of Formula I wherein two of X^1, X^2 and X^3 are nitrogen and the other is carbon, corresponding composition and method of use.

III. Claims 36, 62-63, 1 and 28-35, drawn to compounds of Formula I wherein one of X^1, X^2 and X^3 is nitrogen and the other tw are carbon, corresponding composition and method of use.

On May 7, 2002, an election was made to prosecute the invention of Group I. Applicants hereby confirm that election and cancel claims to the non-elected inventions from the present application.

II. 35 USC § 112, 2nd PARAGRAPH CLAIM REJECTION

The rejection of claims 9, 28-35, 44 and 62 under 35 USC § 112, Second Paragraph have been overcome for the following reasons.

1. Claims 9 and 44 were rejected because R^4 is defined as methyl but the compound is named as a pentylthio derivative.

Applicants thank the Examiner for drawing their attention to this typographical error, and have amended claims 9 and 44 accordingly.

2. Claims 28, 30, 32 and 34 were rejected because they are in independent form, but do not disclose Formula I in the claim.

Applicants have amended the claims to be dependent claims rather than independent by reciting "a compound of claim 1" rather than "a compound of Formula I". Applicants have also amended the claims to delete the word "useful", as suggested by the Examiner.

3. Claim 62 was rejected for reciting "effective amount of a compound of claim 1", when claim 1 is a claim to a method of treatment.

Applicants have amended the preamble of claim 62 to direct the claim to a method of treatment. Thus, claim 62 is not a duplicate of claim 63, as claim 63 is dependent upon claim 36.

Applicants respectfully submit that the above amendments overcome the rejections, and that the rejection of claims 9, 28-35, 44 and 62 under 35 USC § 112, second paragraph, should be withdrawn.

III. REJECTION OF CLAIMS 36-38 UNDER 35 USC § 102

Claims 36-38 were rejected under 35 USC § 102(b) as being anticipated by Levitt, U.S. Patent No. 4,892,946. Applicants respectfully traverse the rejection.

The compound cited by the Examiner as being disclosed in Levitt is 4-methoxymethyl-6-methylthi -2-amino-1,3,5-triazine. Applicants respectfully submit that this compound is excluded from claims 36-38 by the proviso that "when A is a covalent bond, R^1 and R^2 are both hydrogen, Y^2 is methylene, and R^4 is methyl or ethyl, R^3 cannot be lower alkyl or unsubstituted phenyl". Thus, 4-methoxymethyl is not a choice when there is an amino group at the 6-position and R^4 is methyl.

Applicants respectfully submit that the rejection of claims 36-38 under 35 USC § 102(b) as being anticipated by Levitt, U.S. Patent No. 4,892,946 should be withdrawn.

IV. CLAIM OBJECTIONS

The Examiner indicated that claims 1-8, 10-13, 39-43, 45-47 and 63 are objected to because they contain non-elected subject matter, but appropriate amendment would overcome the objection. The Examiner also indicated that claims 29-35 would also be allowable if amended to overcome the 35 U.S.C. 112, second paragraph rejections.

Applicants respectfully submit that the above amendments and accompanying remarks have overcome the objections and rejections, and that all claims of Group I are now in a condition for allowance.

Respectfully submitted,

McDONNELL BOEHNEN HULBERT & BERGHOFF

Dated: September 20, 2002 By: 

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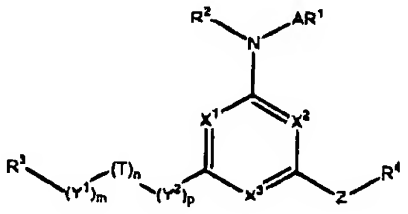
APPENDIX A

Marked Up Claims Pursuant To 37 CFR 1.121

1. (Once amended) A method of treating a disease state in a mammal that is alleviable by treatment with an agent capable of increasing ABCA-1 expression, comprising administering to a mammal in need thereof a therapeutically effective dose of a compound of the Formula I:



Formula I

wherein:

m, n and p are independently 0 or 1;

A is $-C(Z^1)-$, $-C(Z^1)-NH-$, SO_2, or a covalent bond;

where Z^1 is oxygen or sulfur;

R^1 is hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aryl, or optionally substituted heteroaryl;

R^2 is hydrogen , alkyl, or cycloalkyl: or

R^1, R^2 and A when taken together with the nitrogen atom to which they are attached form a nitrogen bearing heterocycle;

R^3 is optionally substituted alkyl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aryl, or optionally substituted heteroaryl;

R^4 is hydrogen, optionally substituted alkyl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aryl, or optionally substituted heteroaryl;

T is $-O-$, $-S(O)_q$, or $-NR^5-$;

in which q is 0, 1, or 2, and R^5 is hydrogen, optionally substituted alkyl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aryl, or optionally substituted heteroaryl;

X^1, X^2, and X^3 are [independently -CR^6 or] nitrogen[, in which R^6 is hydrogen, ptionally substituted alkyl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aryl, or optionally substituted heteroaryl;

with the proviso that at least one of X^1, X^2, and X^3 is nitrogen.];

Y^1 is lower alkylene or carbonyl;

Y^2 is lower alkylene or oxygen; and

Z is sulfur, oxygen, or -NR^5-.

3. (Once amended) The method of claim [2] 1, wherein R^2 is hydrogen, R^4 is optionally substituted alkyl and Z is sulfur.

9. (Once amended) The method of claim 8, wherein R^3 is 4-t-butylphenyl and R^4 is methyl, namely 6-{[4-(tert-butyl)phenoxy]methyl}-4-[pentyl]methylthio-1,3,5-triazine-2-ylamine.

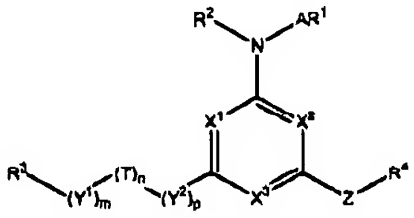
28. (Once amended) A method for treating a disease or condition in a mammal that can be [usefully] treated with a compound that elevates serum levels of HDL cholesterol, comprising administering to a mammal in need thereof a therapeutically effective dose of a compound of [Formula I] claim 1.

30. (Once amended) A method for treating a disease or condition in a mammal related to low HDL cholesterol levels, comprising administering to a mammal in need thereof a therapeutically effective dose of a compound of [Formula I] claim1.

32. (Once amended) A method for treating a disease or condition in a mammal that can be [usefully] treated with a compound that promotes cholesterol efflux from cells, comprising administering to a mammal in need thereof a therapeutically effective dose of a compound of [Formula I] claim 1.

34. (Once amended) A method for treating a condition related to coronary artery disease in a mammal that can be [usefully] treated with a combination of a compound that elevates serum levels of HDL cholesterol and a compound that lowers LDL cholesterol, comprising administering to a mammal in need thereof a therapeutically effective dose of a compound of [Formula I] claim 1 and a compound that lowers LDL cholesterol.

36. (Once amended) A compound of the Formula I:



Formula I

wherein:

m, n and p are independently 0 or 1;

A is $-C(Z^1)-$, $-C(Z^1)-NH-$, SO_2, or a covalent bond;

where Z^1 is oxygen or sulfur;

R^1 is hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aryl, or optionally substituted heteroaryl;

R^2 is hydrogen , alkyl, or cycloalkyl; or

R^1, R^2 and A when taken together with the nitrogen atom to which they are attached form a nitrogen bearing heterocycle;

R^3 is optionally substituted alkyl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aryl, or optionally substituted heteroaryl;

R^4 is hydrogen, optionally substituted alkyl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aryl, or optionally substituted heteroaryl;

T is $-O-$, $-S(O)_q$, or $-NR^5-$;

in which q is 0, 1, or 2, and R^5 is hydrogen, optionally substituted alkyl, ptionally substituted cycloalkyl, optionally substituted heterocyclyl, opti nally substituted aryl, or optionally substituted heteroaryl;

X^1, X^2, and X^3 are [independently -CR^6 or] nitrogen[, in which R^6 is hydrogen, optionally substituted alkyl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aryl, or optionally substituted heteroaryl];

[with the proviso that at least one of X^1, X^2, and X^3 is nitrogen.];

Y^1 is lower alkylene or carbonyl;

Y^2 is lower alkylene or oxygen; and

Z is sulfur, oxygen, or -NR^5-.

with the proviso that when A is a covalent bond, R^1 and R^2 are both hydrogen, and Z is -NH-, m, n, and p cannot all be 0; and

when m is 0, Y^2 is methylene, and Z is -NH-, R^3 cannot be lower alkyl; and

when Z is -NH-, R^4 cannot be phenylethyl; and

when A is a covalent bond, R^1 and R^2 are both hydrogen, Y^2 is methylene, and R^4 is methyl or ethyl, R^3 cannot be lower alkyl or unsubstituted phenyl; and

when A is a covalent bond, R^1 and R^2 are both hydrogen, T is oxygen, Z is nitrogen, and Y^2 is methylene, R^4 cannot be cycloalkyl or unsubstituted phenyl.

44. (Once amended) The compound of claim 43, wherein R^3 is 4-t-butylphenyl and R^4 is methyl, namely 6-{[4-(tert-butyl)phenoxy]methyl}-4-[pentyl]methylthio-1,3,5-triazine-2-ylamine.

62. (Once amended) The method of claim 1 wherein the therapeutically effective dose includes [A pharmaceutical composition comprising] at least one pharmaceutically acceptable excipient[and a therapeutically effective amount of a compound of claim 1].